

Some Observations Regarding the Behavior of
Quartz Sand and Powdered Quartz in Glass Melts,
by A. Dietzel, H. Wickert.

GERMAN, per, Glastech Ber, Vol XXVII, 1954,
pp 170-172.

ASLIB-CH105

Sci
Aug 58

78, 791

Correction Procedures for the Flame-Photometric
Sodium Determination w/ in the Presence of
Calcium, by Friedrich Hegemann, Barbara Pfab,
9 pp.

GERMAN, per, Glastechnische Berichte, Vol XXVII,
No 6, 1954, pp 189-192. 9688755

DEC RSIC-72

Sci - Chem
Nov 63

241,676

Brüche, Ernst and Schimmel, Gerhard.

ABOUT THE SCRATCHING OF GLASS BELOW ONE MICRON SCRATCH TRACT WIDTH (Über das Ritzten von Glas unter 1 μ Ritzspurbreite). [1951] [31p].
(foreign text included) 29 refs.

Order from SLA \$3.60

61-20840

Trans. of Glastechnische Berichte (West Germany)
1954, v. 27, no. 7, Sonderdruck, p. 239-247.

DESCRIPTORS: *Glass, Diamonds, Electron microscopes, Plasticity, Temperature, Fracture (Mechanics), Elasticity, Deformation, Cutting tools

(Materials--Ceramics, TT, v. 7, no. 5)

61-20840

I. Brüche, E.
II. Schimmel, G.

Office of Technical Services

<p>Ramsauer, Rembert. APPLICATION OF THE SCHLIEREN MICROSCOPE FOR THE INVESTIGATION OF LAYER STRUC- TURES IN PLATE GLASS (Anwendung des Schlierenmikroskopes zur Untersuchung der Schicht- ung von Tafelglas). Paper read at the Glass Techno- logical Convention (no. 28) Hamburg, 20 May 54. [1962] [31]p. (foreign text included) 8 refs. Order from SLA \$3.60</p> <p>Trans. of Glastechnische Berichte (West Germany) 1954, v. 27, no. 10, p. 374-381.</p> <p>DESCRIPTORS: *Glass, Microstructure, Micro- analysis, Microscopy, *Schlieren photography, Re- fractive index, Optics.</p> <p>(Materials--Ceramics, TT, v. 8, no. 5)</p>	<p>62-14883</p> <p>I. Ramsauer, R. II. Title: Glass...</p> <p>62-14883</p>	
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Analysis of Schlioren and Layers by Etching
and Interference Measurements, by J. Loffler.

GERMAN, per, Glastechnische Berichte,
Vol XXVII, 1954, pp 381-392.

CSIRO

SRA 62-14781

Sci - Phys
Aug 62

211, 323

The Behavior of Glass - Flow and Relaxation,
by Paul G. Migeotte, Henri P. C. Vandecasteele,
18 pp.

GERMANY, par, Glastechnische Berichte, Vol XXVII,
No 11, 1954, pp 405-409.

SIA 60-16845

Sci
Vol IV, No 7
May 1952

193, 701

Concerning the Silicate Decomposition
According to W. Pukall, by W. Geilmann,
A. Maenssle.
GERMAN, per, Glastechnische Berichte,
Vol 28, No 1, 1955, pp. 16-8.
NTC 69-11731-11B

Sci-Bchem
July 69

386,672

A Simple Experiment for Producing
Fracture Lines by Mechanical Impulses,
by F. Kerkhof.
GERMAN, per, Glastechnische Berichte,
Vol 28, No 2, 1955, pp. 57-8
NTC 69-11732-11B

Sci-Mat
July 69

386,673

Contribution to the Knowledge of Old
Glasses. Part III. The Chemical Compos-
ition of Some Ancient Glasses. Especially
of German Glasses of the 10th to the 18th
Centuries, by W. Geilmann.
GERMAN, per, Glastechnische Berichte,
Vol 28, No 4, 1955, pp. 146-56.
NTC 69-11733-11B

Sci-Mat
July 69

386,674

On the Radiation ~~Effect~~ on the Interior of Glass
Tanks, by Marianus Czerny, Ludwig Genzel,
Gerhard Heilmann, 21 pp.

GERMAN, pay, Glastech Berichte, Vol XXVIII,
No 5, 1955, pp 185-190.

SLA 60-18513

Sci

203,545-

Jul 62
Vol 4, No 12

External Pressure Testing of Glass
Bottles, by L. H. Lehnert.

GERMAN, per, Glastechnische Berichte,
Vol XXVIII, No 7, 1955, pp 255-262.

CSIRO

Sci - Engr
Doc 61

175 754

Investigations into the Causes of Breakdown of
Regenerator Chequer Refractories in Glass
Furnaces, by E. Steinhoff, 6 pp.

GERMAN, per, *Glastechnische Berichte*,
Vol XXVIII, No 7, 1955, pp 266-272.

CSIRO

Sci - Phys
Nov 61

205-272 OTS 62-18207
(63-14034)

174,382

Temperature Measurements in Glass Melting
Tanks, by R. Gunther, 4 pp.

GERMAN, per, Glastechnische Berichte,
Vol XXVIII, No 8, 1955, pp 295-299.

CSIRO

Sci - G Phys
Nov 61

174, 380

Dependence of the Transformation Temperature of
an Li_2O Glass on the Previous Heat Treatment and
on the Conditions of the Experiment, by F. Rablff,
K. P. Zobel. UNCLASSIFIED

GERMAN, per, Glastech Berichte, Vol IXVIII, No 8,
1955, pp 310-312.

DSIR/32470/CT

Sci - Chem; Phys
Cat 58

73-432

Temperature Measurements in Glass Molds,
by W. Trier. 63 p.
GERMAN, per, Glastechnische Berichte,
Vol 28, No 9, 1955, pp 336-351.
SIA TT-66-10671

Sci-M&M
Jul 66 305,599

Methods of Mould Cooling in Glass-Forming
Machines, by R. Wille, 8 pp.

GERMAN, per, Glastechnische Berichte,
Vol XXVIII, No 9, 1955, pp 351-359.

CSTRO

Sci - Phys
Nov 61

174,383

Schreck, Carl Walter,
CONTRIBUTION TO THE DETERMINATION OF THE
HEAT FLUX IN THE WALLS OF GLASS MOLDS
(Beitrag zur Ermittlung des Wärmeflusses in den
Wänden von Glasformen). [1963] [38p] (foreign text
included) 10refs

Order from SLA \$3.60 63-18590

Trans. of Glastechnische Berichte (West Germany)
1955, v. 28, no. 9, p. 359-368.

DESCRIPTORS: *Glass, Molding, Heat transfer, Walls,
Cooling, Temperature, Distribution, Determination,
Thermal conductivity.

The heat flux and with it the temperature distribution
in the mold can be discussed approximately as a
stationary problem under the condition of constant
heat flow density at the internal margin. The problem
(Materials--Ceramics, TT, v. 10, no. 10) (over)

63-18590

1. Schreck, C. W.

Office of Technical Services

Scholze, Horst and Dietzel, Adolf.

INVESTIGATIONS ON THE WATER CONTENT OF
GLASSES THROUGH DETERMINATION OF THE IN-
FRARED ABSORPTION IN THE RANGE FROM 1 TO
5 mu (Untersuchungen über den Wassergehalt von
Gläsern durch Bestimmung der Ultrarot-Absorption im
Bereich von 1 bis 5 μ). [1962] [21 p. (foreign text
included) 42 rfs.

Order from SLA \$2.60

62-10945

I. Scholze, H.
II. Dietzel, A.

Trans. of Glastechnische Berichte (West Germany)
1955, v. 28, no. 10, p. 375-380.

DESCRIPTORS: *Water, *Glass, *Infrared radiation,
*Absorption, Iron, Sodium, Calcium, Hydroxides,
High temperature research.

A literature compilation is given on the infrared ab-
sorption of glasses in the range from 1 to 5 mu, with
special regard for the bands produced by OII- or
(Materials--Ceramics, TT, v. 8, no. 7) (over)

62-10945
Office of Technical Services

The Fundamental Reactions in the Process of Fusion
of Sulphate Glass, by C. Kroger, E. Vogel.

GERMAN, per, Glastech Ber, Vol XXVIII, 1955,
pp 426-437.

INSDOC-T1383

Sci
Aug 58

70,795

The Action of Silicon Containing Lacquer Protectir Agents on Windscreens, by R. Ransauer.

GERMAN, per, Glastech Ber, Vol XXVIII, No 12, 1955
pp 451-455.

DSIR/31209/CT

Sci - Chem
Feb 58

58, 856

Electron Microscope Investigations
of Fracture Surface of Opal Glass,
by F. Kerkhof, R. Seeliger. W. Westphal.
GERMAN, per, Glastechnische Berichte,
Vol 28, No 7, 1955, pp. 262-4.
NTC 69-11730-11B

Sci-Shem
July 89

386,671

Replica Techniques Useful for the
Investigation of Glass Surfaces
Microscopically, by W. Geilman, G.
Toelg.

GERMAN, per, Glastechnische Berichte,
Vol 28, No 8, pp5529pp302991807
Ntc 69-11734-11B

No. 8, 1955 R209-307

Sci-Mat
July 69

386,675

Dietzel, Adolph and Brijckner, Rolf.
CONSTRUCTION OF AN ABSOLUTE VISCOSIMETER
FOR HIGHER TEMPERATURES AND ITS CALIBRA-
TION BY MEASURING OF VISCOSITIES OF MOLTEN
BORIC ACID. 30p 26refs
Order from SLA \$2.60

TT-64-16336

Trans. of Glastechnische Berichte (West Germany)
1955, v. 28 (no. 12) p. 455-467.

TT-64-16336

I. Dietzel, A.
II. Brijckner, R.

(Materials--Ceramics, TT, v. 12, no. 3)

Office of Technical Services

On the Dissipation of Heat in Glass at High Temperatures, Pt. 3, by W. Geffcken.

GERMAN, Par, Glastech Ber, Vol XXIX, No 2, 1956,
pp 42-49.

SLA 60-16852
ABLIB-CH105

Sci

Aug 59

94, 177

The Fining of Glass by Introducing
Additional Gases in the Melt, J. ~~Widtmann~~
Widtmann.

GERMAN, per, Glastechnische Berichte,
Vol 29, No 2, 1956, pp. 37-42.
NTC 69-11729-11B

Sci-Batm
July 69

386,670

Riedel, Leopold. OBSERVATIONS ON STREAMS AND DROPS (Beobachtungen an Flüssen und Tropfen). [1962] 5p. 1 ref. Order from SLA \$1.10	62-18203 I. Title: Cohart block I. Riedel, L.
Trans. of Glastechn[ische] Ber[ichte] (West Germany) 1956, v. 29, no. 2, p. 49-51.	
DESCRIPTORS: *Glass, Processing, Ceramic materials Solutions, *Fused materials, *Melting, Temperature, Silicates, Impurities, *Quartz crystals, Quartz.	

(Materials--Ceramics, TT, v. 9, no. 5)

Office of Technical Services

On Thermolectric Phenomena in Glass,
by W. Oldekop.

GERMAN, per, Glastechnische Berichte,
Vol XXIX, 1956, pp 73-78.

ASLIB GB 105

Scanned by

192, 107

Sci - Phys
Apr 62

Experimented Investigation of Bubble Formation in
Electrically Heated Model Glass Tanks, by N.
Shmiede.

GERMAN, per, Glastech Ber, Vol XXIX, No 3, Mar 1956,
pp 78-83.

ASLIB-GR105

SLA 63-4405

Aug 59

94, 183

On the Sensitivity of the Interference and
"Schlieren" Methods of Examining Layering
in Sheet Glass, by H. Hannes.

GERMAN, per, Glastechnische Berichte,
Vol IXIX, No 3, 1970, pp 63-89.

RECBIRO

Sci - Phys
Jun 62

199, 602

Electron Microscope Investigations on Weathered
Glass Surfaces, by F. Oberlies.

GERMAN, per, Glastechnische Berichte, Vol XXIX,
No 4, Apr 1958, pp 102-120.

ASLIB-GB105

Sci

Aug 59

95, 372

Observations on the Action of Dilute Hydro-fluoric Acid on Glass Surfaces, by Boneff, Stoyan, Schwiete, Hans Ernst, 29 pp.

GERMAN, per, Glastechnische Berichte, 1956,
Vol XXIX, No 4, pp 120-128.

SLA 59-10616

Sci - Chem
OBS I, 12
Jul 59

92, 296

The Structure at the Edge of Water Droplets
in Contact with Glass and Its Significance,
by Hans Jebsen-Marvedal, 8 pp.

GERMAN, per, Glastech Ber, 1956, Vol XXIX,
No 4, pp 128-130.

SLA 59-10618

Sci - Phys
OTS I, 12
Jul 59

97, 302

Witten, Johannes Loeffler.
TESTING OF SHEET GLASS FOR SENSITIVITY TO
CLIMATE. [1962] 16p. (5 figs. 21 refs. omitted).
Order from SLA \$1.60

Trans. of *Glastechn[ische] Ber[ichte]* (West Germany)
1956, v. 29, no. 4, p. 131-137.

DESCRIPTORS: *Glass, Sensitivity, *Climatic factors,
Test methods.

Sheet glass is decomposed by moisture only in its
packing, either by wet rain or when stored in moist
rooms. Two types of decomposition appear as damages,
which show, however, the same technical course and
produce the same typical defect, the so-called dulling,
which is absence of reflection by chemical changes in
the top layer. The testing method described here re-
produces, in contrast to all other methods, the defect
(Materials--Ceramics, TT, v. 8, no. 1) (over)

62-14499

I. Witten, J. L.

Office of Technical Services

Water Durability of Glass as Determined by
the German Powder Titration Method DIN 12111,
by Ernst Wiegel, 33 pp.

GERMAN, per, Glastech Ber, 1956, Vol XXIX,
No 4, pp 137-144.

SLA 59-10617

Sci - Phys
OTS I, 12
Jul 59

92, 309

Introduction to the Fundamentals of Glass
Structure, by Otto W. Flörke, Lothar K. Lehnert,
Horst Scholze, 19 pp.

GERMAN, per, Glastechnische Berichte, 1956,
Vol XXIX, No 5, pp 169-174.

SLA 59-10615

Sci - Chem
OTS I, 12
Jul 59

92,297

<p>Günther, Rudolf and Kahlert, Wolfgang. VARIATIONS IN THE HEAT CONSUMPTION OF TANKS AND THEIR CAUSES (Veränderungen des Wärmeverbrauchs von Wannen und ihre Ursachen). [1962] [36]p. (foreign text included) 9 refs. Order from SLA \$3.60</p> <p>Trans. of <u>Glastechnische Berichte</u> (West Germany) 1956, v. 29, no. 5, p. 174-183.</p> <p>DESCRIPTORS: *Glass, Melting, *Heat exchangers, Heat of fusion, Tanks, Numerical analysis, Curve fitting, Periodic variations, *Fuel consumption, Gas generating systems, Specific heat, Aging.</p> <p>(Materials--Ceramics, TT, v. 9, no. 3)</p>	<p>62-18112</p> <p>I. Title: Tank furnaces I. Günther, R. II. Kahlert, W.</p> <p>62-18112</p> <p>Office of Technical Services</p>
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Dynactive Liquid-Pairs, Their Behavior and
Practical Significance for Glass Melting,
by Hans Jeben-Marwedel, 21 pp.

GERMAN, per, Glastechnische Berichte, 1956,
Vol XXIX, No 6, pp 233-238.

SLA 59-10608

Sci - Chem
OTS I, 12
Jul 59

92, 299

<p>Baier, Ernst, Schefer, Werner, and Steinwehr Helmut Ernst v. CONCERNING THE COLORATION OF BORAX GLASSES BY IRON (Über die Färbung von Boraxgläsern durch Eisen). [1962] [15] p. (foreign text included) 15 refs. Order from SLA \$1.60 62-14863 Trans. of Glastechn[ische] Ber[ichte] (West Germany) 1956, v. 29, no. 6, p. 247-251. DESCRIPTORS: *Glass, *Borax, *Iron, *Color, Spectrographic analysis. The authors were able by metal-addition to obtain pure ferro-borax glasses, and to demonstrate their ferrifreedom chemically and optically. Production and testing are described, and some spectral permeability curves are reproduced. The visual color of the pure ferro-glasses was blue. (Author) (Materials--Ceramics, TT, v. 9, no. 1)</p>	<p>62-14863 I. Baier, E. II. Schefer, W. III. Steinwehr, H. E. v. 62-14863 Office of Technical Services</p>
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Cords in Glass - a Consequence of the
"Dynamative" Behaviour of "Schieren", by
H. Jebbenharvedel,

GERMAN, per, Glastechnische Berichte, Vol XXIX,
No 7, pp 269-275. 1956

SAC-162-1-92

C.B.I.R.O.

Sci - Chem

May 60

116,927

4

Origin and Tasks of the Glass Division of
the State Materials Testing Station in
Darmstadt, by Heinrich Wiegand, 20 pp.

GERMAN, per, Glastech Ber, 1956, Vol XXIX,
No 8, pp 309-313.

SLA 59-10620

Sci - Phys
OIS I, 12
Jul 59

92; 308

<p>Lehnert, Lothar H. DEVELOPMENT OF STANDARD TESTING METHODS FOR HOLLOW GLASS VESSELS (Entwicklung von Normprüfverfahren für Hohlglasgefäße). [Paper presented] at the Glass Technology Meeting (no. 30) Tübingen, 16 May 56. (foreign text included) 14 refs. Order from SLA \$1.60</p> <p>Trans. of Glästechnische Berichte (West Germany) 1956, v. 29, no. 8, p. 314-318.</p> <p>DESCRIPTORS: *Glass, Containers, Test methods, Standards, Quality control, *Pressure vessels, Materials.</p> <p>(Materials, TG, v. 8, no. 4)</p>	<p>62-14869</p> <p>I. Lehnert, L. H. II. Title: Glass...</p> <p>62-14869</p>
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Paetsch, Hans Hermann and Dietzel, Adolf.
INVESTIGATIONS ON THE PbO-SiO₂-P₂O₅ SYSTEM
(Untersuchungen über das System PbO-SiO₂-P₂O₅).
[1962] [47]p. (foreign text included) 42 refs.
Order from SLA \$4.60 62-16461

Trans. of Glästechnische Berichte (West Germany)
1956, v. 29, no. 9, p. 345-356.

DESCRIPTORS: *Glass, *Phosphate glass, *Silicates,
*Lead compounds, Oxides, Microstructures, X-ray
diffraction analysis

The PbO-rich corner of the three-substance system
PbO-SiO₂-P₂O₅ was examined with thermal, microscopic and X-ray methods. The results available from the binary systems PbO-SiO₂ and PbO-P₂O₅ were confirmed in general and supplemented in part. The ternary system is characterized by a wide region of dissociation and by the appearance of a ternary compound
(Materials--Ceramics, TT, v. 8, no. 7) (over)

62-16461

I. Paetsch, H. H.
II. Dietzel, A.

Office of Technical Services

Wetting Properties and Mechanical Strength of Glass
to Metal Seals, by W. Weiss.

GERMAN, per, Glastech Ber., Vol XXIX, No 10, 1956,
pp 386-392.

TIL Tr 4824

59,170

Sci - Physics
Mar 58

Heats of Solution and Formation of Sodium
Silicates, by C. Kroger, G. Kreitlow,

GERMAN, per, Glastechnische Berichte,
Vol XXIX, No 10, pp 393-400, 1956,

C.S.I.R.O.

Sci - Chem

May 60

116,928

OTS 62-12121

Flame Studies; Methods and Results, by
Rudolf Gunther, 37 pp.

GERMAN, per, Glastechnische Berichte, 1956,
Vol XXIX, No 11, pp 417-426.

SIA 59-10614

Sci - Chem
OTS I, 12
Jul 59

92,265

Trier, Wolfgang,
ON THE DEVELOPMENT OF FLAMES (Über die Ausbildung von Flammen). [1962] [10]p. (foreign text included) 6 refs.
Order from SLA \$1.10 62-10949

Trans. of Glästechn[ische] Ber[ichte] (West Germany) 1956, v. 24, no. 11, p. 426-428.

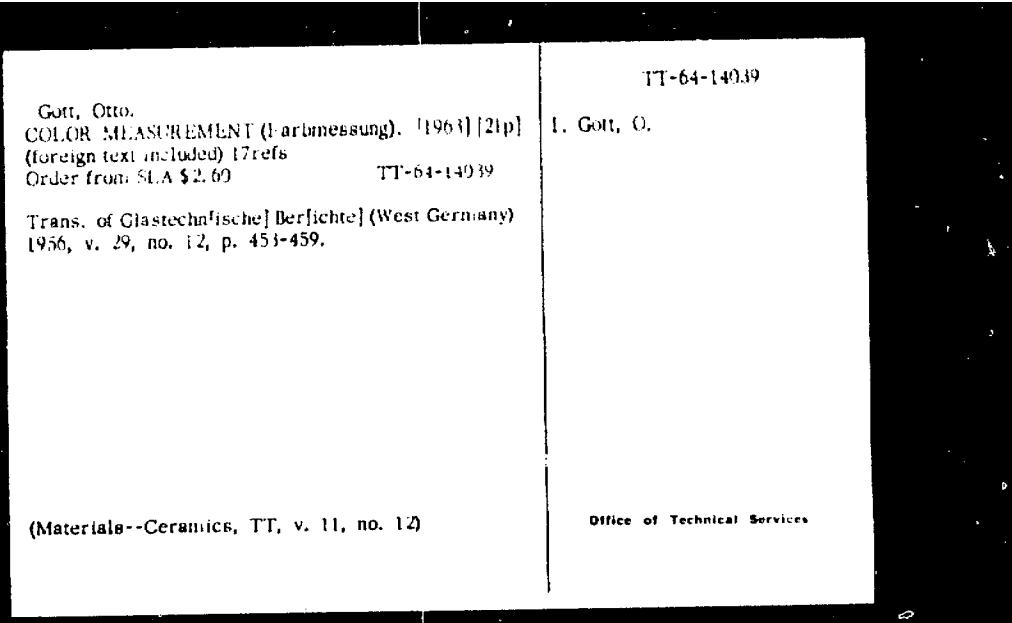
DESCRIPTORS: *Flames, Gases, Combustion, Gas flow, Turbulence, Jets, Jet mixing flow, Flame propagation, *Glass, Melting.

The processes which contribute decisively to the formation of flames are discussed. A mathematical conception and tying in of the individual fundamental magnitudes is today possible to a certain extent only in flames which burn like sets. Pertinent English and American works are referred to. (Author)

(Materials--Ceramics, TT, v. 8, no. 6)

62-10949
I. Trier, W. 62-10949

Office of Technical Services



The Examination of the Breakage Process with
Supersonic Techniques, by Frank Kerkhof, Helmut
Dreizler, 46 pp.

GERMAN, per, Glastech Ber, 1956, Vol XXIX,
No 12, pp 459-470.

SLA 59-10619

Sci - Phys
OTS I, 12
Jul 59

92, 303

On the Calculation Of the Radiation Flux In the
Glass Metal In Tank Furnaces, by M. Czerny and
L. Cenzel.

GERMAN, per, Glastechnische Berichte, Vol XXX,
No 1, 1957, pp 1-7.

CSIRO

SLA 63-14647

Oct. 62

Theoretical Considerations on the Viscosity
of Glass, by W. Oldekop, 25 pp.

GERMAN, per, Glastech Ber, 1957, Vol XXX,
No 1, pp 8-14.

SLA 59-10621

Sci - Phys
OTS I, 12
Jul 59

92, 307

On the Structure of Quartz Glass, by P. Oberliss,
A. Dietzel,

GERMAN, per, Glastechnische Berichte, Vol XXX, No 2,
pp 37-42. 1957

C.S.I.R.O.

Sc1

May 60

116,098

On the Velocity, Mechanism and Formation of
New Phases of Solid State Reactions in
Melting, by Carl Kroger, 34 pp.

GERMAN, per, Glastech Ber, 1957, Vol XXX,
No 2, pp 42-52.

SLA 59-10611

Sci - Phys
DB I, 12
Jul 59

97, 305

Lehnert, Lothar H.

THE HEAT SHOCK TESTING OF GLASS AND
GLASS CONTAINERS (Die Wärmestossprüfung von
glas und Glasgefässen). [1963] [16p] (foreign text
included) 52refs

Order from SLA \$1.60

63-20370

Trans. of Glastechnische Berichte (West Germany)
1957, v. 30, no. 3, p. 79-83.

DESCRIPTORS: *Containers, *Glass, Temperature,
Stability, Shock resistance, Thermal stresses,
*Quenching (Cooling).

Among the various testing possibilities for the determination of the temperature change stability of glass, the quenching test was selected and standardized. According to DIN 52,325 the working material "glass" is tested with the aid of well defined samples which must be free of strain. According to DIN 52,321 the influence (Materials--Ceramics, IT, v. 10, no. 12) (over)

63-20370

L. Lehnert, L. H.

Office of Technical Services

A Fixed Point of the Viscosity in the
Processing Region of Glasses. Rapid
Determination of the Viscosity-Temper-
ature Course, by A. Dietzel, R. Brueckner.
GERMAN, per, Glastechnische Berichte,
Vol 30, No 3, 1957, pp. 73-9.
NTC 69-11728-11B

Sci-Mat
July 69

386,669

The Alkali Loss of the Glass Surface in Hot
Forming, by Johannes Loffler, 16 pp.

GERMAN, per, Glastech Ber, 1957, Vol XXX,
No 3, pp 88-94.

SLA 59-10610

Sci - Phys
OTS I, 12
Jul 59

92, 306

<p>Riedel, Leopold. METHODS FOR TESTING HOMOGENEITY OF MIXTURES (Verfahren zur Prüfung der Homogenität von Gemengen). Paper [presented at] annual meeting of Hüttentechnische Vereinigung der Deutschen Glasindus- trie, Bad Neuenahr, 12 Oct 56. [1962] [10p. (foreign text included) 10 refs. Order from SLA \$1.10</p> <p>Trans. of <u>Glastechnische Berichte</u> (West Germany) 1957, v. 30, no. 4, p. 113-115.</p> <p>DESCRIPTORS: *Glass, *Mixtures, Distribution, Test methods.</p> <p>Methods of testing homogeneity of mixtures, especially with cullet, are discussed, and ways of further separa- ting the portions insoluble in water and acid are illustrated. (Author) (Materials--Ceramics, TT, v. 9, no. 4)</p>	<p>62-18134</p> <p>I. Title: Cullet I. Riedel, L. II. Title: Hüttentechnische ...</p> <p>62-18134</p> <p>Office of Technical Services</p>	
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<p>Günther, Rudolf. EFFECT OF MIXTURE PREPARATION AND CHARGING ON HOMOGENEITY (Einfluss der Gemengebereitung und des Einlegens auf die Homogenität). Paper before annual meeting of Hüttentechnische Vereinigung der Deutschen Glasindustrie, Bad Neuenahr, 12 Oct 56. [1962] [8]p. (foreign text included) 7 refs. Order from SLA \$1.10</p> <p>Trans. of Glastechn[ische] Ber[ichte] (West Germany) 1957, v. 30, no. 4, p. 115-116.</p> <p>DESCRIPTORS: *Mixtures, Weights (Analytical), *Glass, Moisture, Sand, *Fused materials, Chemical analysis, Production.</p> <p>The various possible effects of mixers, handling equipment, storage bins, addition of cullet, and charging machinery on homogeneity of mixtures are discussed. (Author)</p>	<p>62-14497</p> <p>I. Günther, R. II. Title: Hüttentechnische ...</p> <p>(Materials--Ceramics, TT, v. 8, no. 2)</p> <p>Dircc of Technical Services</p>
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Löffler, Johannes.

EFFECT OF FUSION PROCESS, PARTICULARLY IN
ITS EARLY STAGES, ON HOMOGENEITY (Über den
Einfluss des Einschmelzvorganges insbesondere seiner
Ersten Stadien auf die Homogenität). [1964] [19p]
(foreign text included) 20refs
Order from SLA \$1.60

TT-64-10571

TT-64-10571
I. Löffler, J.

Trans. of Glastechnische Berichte (West Germany)
1957, v. 30, no. 4, p. 117-121.

(Materials--Ceramics, TT, v. 12, no. 2)

Office of Technical Services

The Melting and Dissolving of Sand in Glass,
by Hans Jebben-Marwedel, 20 pp.

GERMAN, per, Glastech Ber., 1957, Vol XXX,
No 4, pp 122-129.

SLA 59-10613

Sci - Chem
OTS I, 12
Jul 59

92, 300

Diffusion Patterns Around a Sand Particle, by
Johannes Joffe, 14 pp.

GERMAN, ger, Glastech Ber, Vol XXX, No 4, 1957,
pp 129-133.

SLA 59-10609

Sci. - Phys
Sep 59
Vol 2, No 1

97, 922

Weber-Klein, Paul.
THE RAW MATERIAL ECONOMY OF A GLASS
SMELTER, I (Die Versorgungswirtschaft einer
Glashütte I). [1962] [26 p. (foreign text included)
27 refs.

Order from SLA \$2.60 62-10951

Trans. of Gläsernische Berichte (West Germany)
1957, v. 30, no. 5, p. 157-163.

DESCRIPTORS: *Glass, *Smelting, Fuel consumption,
Gases, Oils, Fuels, Economics.

Discussed are the construction, the operation, the
supervision by measurements of producer gas, pipe-
line-gas, oil-heating, and bottled-gas installations on
the base of practical experience and statements from
the literature. (Author)

(Materials--Ceramics, TT, v. 8, no. 6)

62-10951

I. Weber-Klein, P.

Office of Technical Services

A Method for Combined Microscope and X-Ray
Examination of Stones in Glass, by Nina Koppen,
Otto W. Florke, 11 pp.

GERMAN, per, Glastech Ber, 1957, Vol XXX,
No 5, pp 182-186.

SLA 59-10512

CSIRO

Sci - Phys
OTS I, 12
Jul 59

92, 304

Contribution to the Knowledge of the Mean Specific Heats of Some Technically Important Glasses. III.
The Specific Heat of a Barium Glass, by H. Hartmann,
K. H. Kiesalung, 10 pp.

GERMAN, per, Clastech Ber, Vol XXX, No 5, 1957,
pp 186-188.

SEA 59-10607

Sci - Phys
Sep 59
Vol 2, No 1

97 819

Weber-Klein, Paul

THE RAW MATERIAL ECONOMY OF GLASS
SMELTER, II (Die Versorgungswirtschaft einer
Glashütte II). [1962] [40p. (foreign text included)]
18 refs.

Order from SLA \$3.60

62-10952

Trans. of Glastechnische Berichte (West Germany)
1957, v. 30, no. 6, p. 213-221.

DESCRIPTORS: *Glass, *Smelting, Blowers, Com-
pressed air, Oxygen consumption, Water supplies,
Industrial equipment, Economics.

The construction and the operation of installations is
reported on, also of standby equipment, for the air
for blowers, for vacuum, compressed air, oxygen,
water needed in plant operations, warm water, cold
water, steam, also described are installations which
receive the electric current from an external source
(Materials--Ceramics, TT, v. 8, no. 6) (over)

62-10952

I. Weber-Klein, P.

Office of Technical Services

<p>Dietzel, Adolph and Deeg, Emil. A DYNAMIC MODEL OF GLASS STRUCTURE (Ein Dynamisches Modell der Glasstruktur). [1962]. [18]p. (foreign text included) 8 refs. Order from SLA \$1.60</p> <p>62-18108</p> <p>Trans. of <u>Glastechnische Berichte</u> (West Germany) 1957, v. 30, no. 7, p. 282-287.</p> <p>DESCRIPTORS: *Glass, Dynamics, Crystal structure, Model tests, Tensile properties, *Fused materials, Dioxides, Silicon compounds, Polarization, Ions, Me- chanical properties, Stresses.</p> <p>(Materials--Ceramics, TT, v. 9, no. 3)</p>	<p>62-18108</p> <p>I. Title: Quenching I. Dietzel, A. II. Deeg, E.</p> <p>Office of Technical Services</p>
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Contribution to the Optical Examination of Flat
Glass in Reflected Light, by Konrad Metzger, 13 pp.

GERMAN, per, Glastech Ber, Vol XXX, No 7, 1957,
pp 296-299.

SLA 59-10928

Sci - Phys
Sep 59
Vol 2, No 1

97, 924

On Quartz Glasses which Absorb the Ozone-
Producing Radiation Below 2000 Angstrom,
by H. Mohn. 18 p.
GERMAN, per, Glastechnische Berichte,
Vol 29, No 12, 1956, pp 483-487.
SLA TT-66-10677

Sci-M&M
Jul 66

306,004

On the Structure of Quartz Glass,
by F. Oberlies, A. Dietzel. ^{20P}.
GERMAN, per, Glastechnische Berichte,
Vol 30, No 2, 1957, pp 37-42.
SLA TT-66-10676

Sci-M&M
Jul 66

306,003

<p>Giegerich, Wilhelm. RESULTS AND PROBLEMS OF MECHANICAL BOT- TLE PRODU^{TION} (Ergebnisse und Probleme der Maschinellen Flaschenfertigung). [1962] [31]p. (foreign text included) 50 refs. Order from SLA \$3.60</p> <p>Trans. of Glastechische Berichte (West Germany) 1957, v. 30, no. 7, p. 299-307.</p> <p>DESCRIPTORS: *Containers, *Glass, Production, Manufacturing methods.</p> <p>(Materials--Ceramics, TT, v. 8, no. 8)</p>	<p>62-14984</p> <p>I. Giegerich, W.</p> <p>62-14984</p> <p>Office of Technical Services</p>
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Development of Glassmelting Pot Furnaces, by Rudolf
Gunther, Wolfgang Trier, Karl Heinz Theissl, 39 pp.

GERMAN, per, Glastechische Berichte, Vol XXX,
No 7, 1957, pp 308-318.

SLA 59-10926

Sci - Engr
Jul 59
OTS I, 11

91,032

Coloring of Glass with Tellurium, by Yasuaki
Hasegawa, Saito Kawakubo, 11 pp.

GERMAN, per, Galstech Ber., Vol XXX, No 8, PP 1957,
PP 332-335.

SIA 59-10927

Sci - Mngr
Jul 59
CPS I, 11

91, 133

Kerkhof, Frank.
ON THE OPTICAL TESTING OF GLASS PANES
WITH UNEVEN SURFACES (Zur Optischen Prüfung
von Glasscheiben mit Unebenen Oberflächen). [1962]
[46]p. (foreign text included) 11 refs.
Order from SLA \$4.60 62-16414

Trans. of Glastechnische Berichte (West Germany)
1957, v. 30, no. 9, p. 369-379.

DESCRIPTORS: *Glass, Wedges, Surfaces, Optics,
*Optical glass, Light transmission, Test methods,
Refraction, Deflection

(Physics--Optics, TT, v. 8, no. 8)

62-16414

I. Kerkhof, F.

Office of Technical Services

Glass Density and Glass Structure, by Werner
Schwiecker, 22 pp.

GERMAN, per, Glastech Ber, Vol XXX, No 9, 1957,
pp 379-386.

SLA 59-10929

Sci - Phys
Sep 59
Vol 2, No 1

97, 925

<p>Greschat, Karl Hans. THE HEATING UP OF GLASS MELTING TANKS (Über das Antempern von Glasschmelzwannen). [1963] [22]p. 10 refs. Order from SLA \$2.60</p> <p>Trans. of Glastechn[ische] Berichte] (West Germany) 1960, v. 33, no. 10, p. 370-376.</p> <p>DESCRIPTORS: *Glass, *Furnaces, Heating, Design, Thermal insulation.</p> <p>The forces and movements occurring during the heating up of glass melting furnaces have to be taken into account in the construction of these furnaces and especially in the development of the binding steel. In this respect several suggestions are made on the design. In addition to that, data was recently able to be collected on the improved control of the heat-up process (Materials--Ceramics, TT, v. 10, no. 5) (over)</p>	<p>63-14058</p> <p>1. Greschat, K. H.</p> <p>63-14058</p> <p>Office of Technical Services</p>	
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Thring, M. W.

HEAT TRANSFER FROM OIL FLAMES IN MELTING FURNACES (Wärmeübergang aus Ölflammen in Schmelzöfen). Lecture at Glass Technical Convention (no. 31) Frankfurt a. M. 21 May 57. [1962] [47 p.] (foreign text included) 27 refs.

Order from SLA \$4.60

62-10948

Trans. of Glastechnische Berichte (West Germany) 1957, v. 30, no. 10, p. 413-425.

DESCRIPTORS: *Glass, *Melting, Heat transfer, Combustion, Flames, Oils, Fuels, Jets, Gases.

Investigations on turbulent diffusion flames operated with gas and oil in the experimental furnace in Ymuiden led to the setting up of a formula which permits making a statement regarding the flame length in relation to the air drawn in by the jet. The emission capacity of the flame could also be calculated from the soot con- (Materials--Ceramics, TT, v. 8, no. 6) (over)

62-10948

I. Thring, M. W.

II. Title: Glass...

Office of Technical Services

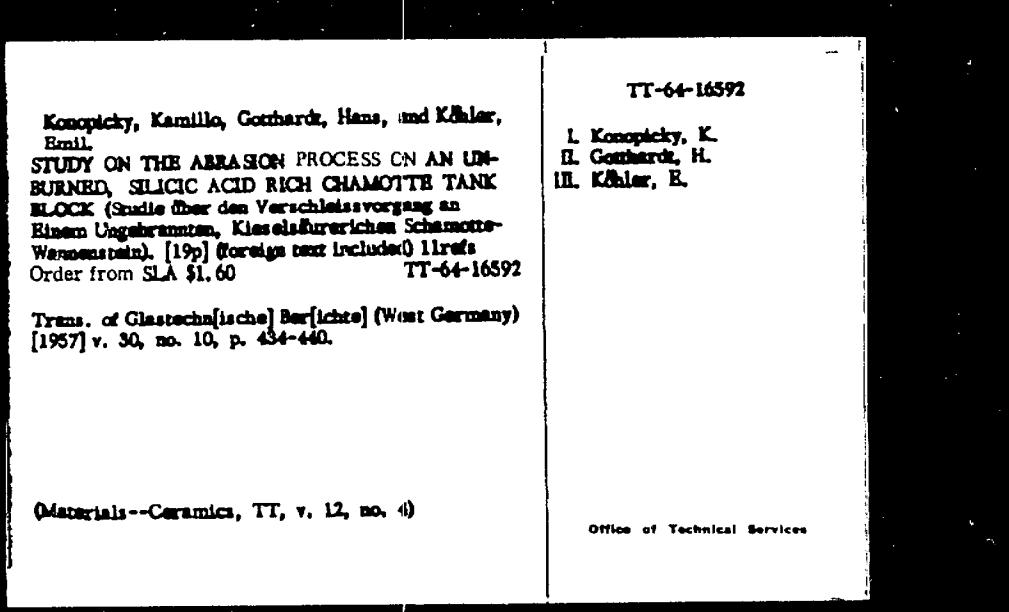
Zircon Bricks as Fireproof Building Material for
Glass Melting Furnaces, by Edward Steinhoff, 39 pp.

GERMAN, per, Glastech Ber, Vol XXX, No 10, 1957,
pp 425-434.

SLA 59-10930

Sci - Engr
Jul 59
OTS I, 11

91,036



Kuhn, Peter and Schimmel, Gerhard.

ELECTRON-MICROSCOPICAL INVESTIGATION OF
GLASS FIBERS (Elektronenmikroskopische Unter-
suchung von Glasfäden). [1961] [25]p. (foreign text
included) 15 refs.

Order from SLA \$2.60

61-20842

Trans. of Glastechnische Berichte (West Germany)
1957, v. 30, no. 11, p. 463-470.

DESCRIPTORS: *Glass textiles, *Synthetic fibers,
*Electron microscopy, Separation, Microanalysis,
Gases, Selenium, Quartz, Lead, Fibers.

Very thin glass fibers were studied microscopically,
directly without recourse to a replica process.
During the irradiation, extremely thin fibers de-
veloped (for quartz glass with diameters below 15 A. u.),
which however could be picked-up unobjectionably.
(Materials--Ceramics, TT, v. 7, no. 5) (over)

61-20842

I. Kuhn, P.
II. Schimmel, G.

Office of Technical Services

Some Remarks On Lead Orthosilica and Germanate and
Their Vitrefaction, by Merker and others.

GERMAN, per, Glastechnische Berichte, Vol XXX,
No 11, 1957, pp 471-473.

CSIRO
SLA 62-16136

Oct. 62

<p>Merker, Ludwig and Wondratschek, Hans. A SERIES OF GLASSES WITH UNUSUAL COM- POSITION (Eine Reihe von Gläsern Ungewöhnlicher Zusammensetzung). [1962] [8]p. (foreign text in- cluded) 5 refs. Order from SLA \$1.10</p> <p>Trans. of Glastechn[ische] Ber[ichte] (West Germany) 1957, v. 39, no. 11, p. 473-475.</p> <p>DESCRIPTORS: *Glass, *Lead compounds, *Sulfates, Fused materials, Optics.</p> <p>In the three-phase system PbO-SiO₂-SO₃ one obtains homogeneous glasses with extraordinarily high SO₃ content. Some such glasses are described. (Author)</p> <p>(Materials--Ceramics, TT, v. 8, no. 6)</p>	<p>62-16137</p> <p>I. Merker, L. II. Wondratschek, H.</p> <p>62-16137</p>	
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Office of Technical Services

Patterson, Wilhelm and Bodmer, Ernst.
ULTRASONIC TESTING OF CAST IRONS WITH
LAMINAR AND SPHEROIDAL GRAPHITE FORMATION.
[1962] [16]p. 20 refs.
Order from SLA \$1.60

62-14424

I. Patterson, W.
II. Bodmer, F.

Trans. of Giesserei. Technische-Wissenschaftliche
Beihefe (West Germany) 1957, no. 17, p. 909-917.

DESCRIPTORS: *Non-destructive testing, *Ultrasonic
radiation, Velocity, *Cast iron, *Graphite, Elasticity,
Shear stresses.

Ultrasonic speed measurements were made for both
longitudinal and transverse waves in test pieces of cast
iron with differing textural formations. From the
different speeds recorded it is possible to differentiate
between a laminar and spheroidal graphite formation.
Using the same measurements it is possible to make an
approximation of the modulus of elasticity in shear and
in tension, and Poisson's ratio. (Author)

(Metallurgy--Ferrous Metals,
TT, v. 10, no. 2)

Office of Technical Services

On the Measurement of Vapor Pressure and Velocity of
Vaporization of Glass Forming Substances, by Karl-
George Graubner, 17 pp.
Berichte über die Fortschritte der Chemie

GERMAN, per, Gleotech Ber, Vol XXXI, No 1, 1958,
pp 9-15.

SLA 59-14931

Sci - Chem
Sep 59
Vol 2, No 1

97918

Rötger, Helmut.

ON THE ELASTIC RELAXATION BEHAVIOR OF SIMPLE AND MIXED ALKALI SILICATES AND BORAX
(Über das Elastische Relaxationsverhalten von Einfachen und Gemischten Alkali-Silikaten und von Borax). [1962]
[23]p. (foreign text included) 24 refs.

Order from SLA \$2.60

62-16139

Trans. of *Glastechnische Berichte* (West Germany)
1958, v. 31, no. 2, p. 54-60.

DESCRIPTORS: Borax, *Borates, Alkali metal compounds, *Silicates, Silicon compounds, Elasticity, Hysteresis, Temperature, Mixtures, Relaxation time, *Glass, Bonding, *Optical glass.

Two strongly pronounced, elastic hysteresis maxima were always found in the temperature range from -180° to plus 300°C with lithium, sodium and potassium silicates and their mixtures. The activation energies of
(Materials--Ceramics, TT, v. 9, no. 1) (over)

62-16139

I. Rötger, II.

Office of Technical Services

Flame-Photometric Aluminum Determination in Glass,
by Friedrich Hegemann, Walter Hert, Wolfgang Schmidt,
~~27~~ pp.
10
GERMAN, per, Glastech Ber Vol XXXI, No 3, 1958,
pp 81-84.

SLA 59-10932

Sci - Engr
Jul 59
OTS I, 11

91,034

Analysis of the Image of a Fracture in Flat Glass,
by Kerna Jørgen-Jarvedal, 6 pp.

GERMAN, per, Glastech Ber., Vol XXXI, No 3, 1958,
pp 93, 94.

SLA 59-10933

Sci - Chem
Sep 59
Vol 2, No 1

97, 920

Determination of the Viscosity-Temperature Curve
With the Aid of Two Fixed Points, by Oscar Knapp,
3 pp.

GERMAN, pcr, Glastech Ber, Vol XXX, No 3, 1958,
pp 94, 95.

SJA 59-10934

Sci - Chem
Sep 59
Vol 2, No 1

97, 921

The Absorption Spectra of γ -Irradiated Quartz Glasses
and Amethyst and Their Changes on Transmission of
Electric Current, by J. Lietz, W. Münkerberg, 12 pp.

GERMAN, per, Glastech Ber, Vol XXXI, No 4, 1958, pp
121-124.

SLA 50-19035

Sci - Engr
Jul 59
OTS I, 11

91,035-

<p>ON THE HYSTERESIS IN POLARIMETER CURVES (Zur Hysterese bei Polarimeterkurven). [1962] [19]p. (foreign text included) 9 refs. Order from SLA \$1.60</p> <p>Trans. of <u>Glastechn[ische] Berichte</u> (West Germany) 1958, v. 31, no. 4, p. 133-137.</p> <p>DESCRIPTORS: *Polarographic analysis, *Hysteresis, Glass, Metals, Bonding, *Seals, Test methods.</p> <p>Polarimeter curves of glass metal seals are recorded with a new device. The curves show a hysteresis which depends on the velocity of the heating-and cooling proc- ess. Reference is made to corresponding phenomena in dilatometric measurements, and an interpretation is submitted on the basis of the glass structure. (Author)</p> <p>(Research Methods, Techniques and Equipment, TT, v. 9, no. 4)</p>	<p>62-18110</p> <p>1. Engel, F.</p> <p>62-18110</p> <p>Office of Technical Services</p>
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About the Leachability of "Ambulant" SO₃ from
Gas-Treated Glass Surfaces and Its Bonding to
the Building Constituents of the Glass, by
Inge Hilgenfeldt, Hans Jebsen-Marvedal, 45 pp.

GERMAN, per, Glastechnische Berichte, 1958,
Vol XXXI, No 5, pp 161-170.

SLA 59-10936

Sci - Chem
OTS I, 12
Jul 59

92, 298

Lehnert, Lothar H.
INVESTIGATION OF STRESSES IN HOLLOW GLASS
VESSELS (Über die Spannungsprüfung von
Hohlglasgefässen). [1962] (14)p. (foreign text in-
cluded) 3 refs.
Order from SLA \$1.60

62-18126

Trans. of Glastechn[ische] Berichte (West Germany)
1958, v. 31, no. 5, p. 176-179.

DESCRIPTORS: *Pressure vessels, Walls; Photo-
elasticity, *Glass, Stresses, Model tests, Light
transmission, Refractive properties.

(Materials--Ceramics, TT, v. 9, no. 3)

62-18126

I. Lehnert, L. H.

Office of Technical Services

The Heat Requirement of Silicate Glass Formation,
by Carl Kroger, Wilhelm Janetzko, Kreitlow, 28 p.

GERMAN, per, Glastechnische Berichte, 1958, Vol XXXI,
No 6, pp 221-228.

SIA 59-10937

Sci
Dec 59
Vol 2, No 6

103, 940

<p>Metzner, Roland, Scheer, Max-Martin, and Scholze, Horst. A RAPID QUANTITATIVE BORON DETERMINATION IN GLASSES WITH THE AID OF THE ABSORPTION OF NEUTRONS (Eine Schnelle Quantitative Borbestimmung in Gläsern mit Hilfe der Absorption von Neutronen). [1962] [16]p. (foreign text included) 8 refs. Order from SLA \$1.60</p> <p>Trans. of Glästechn[ische] Ber[ichte] (West Germany) 1958, v. 31, no. 7, p. 257-260.</p> <p>DESCRIPTORS: *Glass, *Boron, Neutron absorption, Thermal neutrons, Determination.</p> <p>A nuclear physical measuring procedure is given, which permits a comparatively rapid and simple quantitative determination of the B_2O_3 content of glasses with the aid of neutron absorption in the boron. (Materials--Ceramics, TT, v. 8, no. 6) (over)</p>	<p>62-10935</p> <p>I. Metzner, R. II. Scheer, M.-M. III. Scholze, H.</p>	
<p>Office of Technical Services</p>		

Diffusion Process About Sand Grains, by J. Loffler.

GERMAN, per, Glastechnische Berichte, Vol XXXI,
1958, pp 260-269.

CSIRO

Oct. 62

Diffusion Patterns Around the Sand Particles. II,
by Johannes Joeffler, 5 pp.

GERMAN, per, Glastech Ber., Vol XXII, No 7, 1958,
pp 268-269.

SIA 59-10938

Sci - Phys
Sep 59
Vol 2, No 1

97, 923

Sound Insulation of Glasses and
Glazing IX (1) Permanently Built-In
Windows of Single Glazing, by A. Risenberg.

GERMAN, per, Glastechnische Berichte,
Vol XXXI, No 8, 1958, pp 297-302.

CSIRO

Sci - Engr, Phys
Jul 62

204, 889

Rhythmic Precipitation on Glass Through
Delayed Diffusion (Liesegang Rings), by
Hans Jetsen-Marwedel, 14 pp.

GERMAN, per, Glastech Ber, 1958, Vol XXXI,
No 8, pp 311-315.

SLA 59-10939

Sci - Phys
OTS I, 12
Jul 59

92, 301

	62-10946
Teisen, Th. THE UNIFLOW CONTINUOUS GLASS MELTING FURNACE (Der Uniflow-Wannen-Ofen). [1962] [19]p. (foreign text included) 4 refs. Order from SLA \$1.60	I. Teisen, T.
62-10946	
Trans. of Glastechn[ische] Ber[ichte] (West Germany) 1958, v. 31, no. 9, p. 349-353.	
DESCRIPTORS: *Glass, Melting, Production, Oil- burning furnaces, Fuel consumption.	
Construction and working method of the Uniflow con- tinuous glass melting furnace is explained. This fu- nace type is suitable above all for medium size units; it is shown that it fulfills the requirements to be set a good melting furnace to a high degree. (Author)	
(Materials--Ceramics, TT, v. 8, no. 6)	Office of Technical Services

<p>Kerkhof, Frank and Manitz, Gerhart. FRACTURE TRACING BY INTERFERING ULTRA-SOUND WAVES (Bruchzeichnung durch Interferierende Ultraschallwellen). [1962] [18]p. (foreign text included) 3 refs. Order from SLA \$1.60</p> <p>62-16140</p> <p>Trans. of Giastechn[ische] Ber[ichte] (West Germany) 1958, v. 31, no. 10, p. 377-381.</p> <p>DESCRIPTORS: *Glass, *Fracture (Mechanics), *Ultrasonic radiation, *Acrylic resins, Elasticity, Brittle materials, Ultrasonics.</p>	<p>62-16140</p> <p>I. Kerkhof, F. II. Manitz, G.</p>	
(Materials--Ceramics, TT, v. 8, no. 6)	Office of Technical Services	

Silk-Screening; A Decorating Process for Glass, by
Kurt Beversdorfer, 30 pp.

GERMAN, per, Glastechnische Berichte, Vol XXXI,
No 10, 1958, pp 386-394.

SLA 59-1C940

Sci - Engr
Jul 59
OTS I, 11

91,031

Infra-Red Bands in Freshly Prepared and
Weathered B_2O_3 Glass, by R. Brückner,
H. Scholze.

GERMAN, par, Glastechnische Berichte,
Vol XXXI, 1958, pp 417-422.

CSIRO

Sci - Phys
Jul 62

203,457